

Fire Monitor & Nozzle



We Offer
Creative
Design.

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Welcome to Arka Sanat Pishroo

Our dreams is build a new generation of high quality design and development with professional skills and efficiency technology in firefighting and fire alarm systems.

Arka Sanat is specialized in designing, manufacturing and installation Firefighting and Fire Alarm systems. When it comes to fire safety and extinguishing solutions, reliability is essential. Therefore, Arka Sanat exclusively cooperates with internationally acknowledged partners.

Arka Sanat with his brand that name is "Trust" has multiple experiences of consulting and performing in national industries of Oil and Gas, Petrochemical, Refinery, Mining, Municipality, Airport, Fire department, Administrative and Commercial centers.


However Arka Sanat offers a lot more than products and services. By all means, we are involved during the complete project and the final commissioning to finish every project successfully.


Why Choose Us?


Our strong sense of identification with client projects means that we are constantly striving to provide solutions, even for issues they aren't yet aware of. To this end, we adopt a progressive approach to technology and marketing techniques.

This sense of identification also means we value and promote seamless interaction with clients' own teams, and ensure the best value is obtained from their event budget.

We love what we do, some might say a bit too much & we bring enthusiasm and commitment to every project we work on.


 Focus on quality

 Great company value

 Quick response

 20 years of experiences

 Passionate team

 Professional



Our Best Services



Today, The Arka Sanat provides Fire Safety Systems with integrated solutions for any fire protection challenge. The Arka Sanat profession focuses on Designing and Construction a wide variety of safety equipment to human health and safety in the workplace. Rely on Arka Sanat to deliver:



Design & Engineering

Arka Sanat engineering services leverage the cross-functional group of experts at RK to deliver creative, accurate solutions to complicated challenges in a shorter period of time.



Procurement

Making the details come together is critical to a projects success. Our team works with suppliers to negotiate competitive pricing, delivery expectations, logistics, and administrative details. They also work closely with project management to assure all items are at the site when needed in good condition.



Construction

Arka Sanat provides predictable and reliable service for firefighting and Fire Alarm Systems. we offer accountability for results. Safety was the driving force behind the decision to start our company, and it remains a crucial factor on every construction project.

It is better to fail in
originality than to
succeed in imitation





About Our Products

We are a professional and solid company team who works with passion and skills to provide the best design for business needed.

Arka Sanat Company will provide all parts of Fire Monitor and Accessories with the highest quality, as follows:

- Fire Monitor
- Monitor Nozzle
- Tower Monitor
- Trailer Monitor

These are manufactured in corrosion resistant material, bronze and brass and are suitable for both onshore and offshore applications.



We can imagine that you still have some question about you own specific sication after reading this leaflet. Our callegues will be pleased to help you by making a good chance for your kind of risk.

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Fire Monitor



Arka Sanat is a specialist in designing, manufacturing and servicing Fire Fighting Monitors both for land and marine applications. We are specialized in heavy duty, special designed and machined monitors in full stainless steel with a state-of-the-art control system and features that add value to the owners, operators and fire-fighters, Our monitors are fully adjustable and provide flow rates of 1000 to 8,000 lpm as follows:

- Lever S-Type
- Gear S-Type
- Double Waterway Type (Heart)
- Double Gun Type
- Portable Monitor
- Chain Monitor
- Oscillating Type
- Electrical Remote Control Type
- Penumatic Remote Control Type



Standard Reference: NFPA 16, NFPA 24, BS 336
Body Material: Ductile Iron, Cast Iron, Gunmetal, Stainless Steel
Operation System: Hand Lever, Gear Type, Self-Oscillating, Remote Control Electrical or Hydraulic Type

Applications

Monitors are found where there are substantial Class B fire risks, Nearly all industrial fire hazards are candidates for monitor protection, but some of the more common applications are:

- Refineries
- Petrochemical
- Fuel distribution depots
- Chemical plants
- Warehouses
- Helicopter landing pads
- Aircraft hangars
- Loading jetties
- Process plants
- Industrial process areas
- Shipping
- Vehicle-mounted



Model No.: RK - MON - 4222

S - Type Fire Monitor

RK-MO-101 model lever operated manual monitors are constructed with Carbon Steel, Stainless Steel, Brass and Gunmetal materials from 2 1/2" up to 4" water ways and up to 5000 l/min flow rates. These monitors are used for hazards where quick aiming of the firefighting water or foam immediately to the fire source is necessary, thanks to its unlimited directional horizontal movement capacity with no dead point. Grub screw type levers are used to block joints in desired position.

Specification: (RK-MON-4112)

- Control Type: Lever (Manual)
- Inlet connection Size: 4" 150#FF Flanged
- Inlet connection Code: ANSI B16.24
- Flow Rate: 2000 LPM @ 7 bar
- Flow Rate Range: 1800 to 2500 LPM
- Horizontal Throw: 55 meters
- Vertical Thow: 30 meters
- Horizontal Rotation: 0 to 360°
- Vertical Rotation: -40 to +80°
- Material : Bronze
- Design Pressure: 16 barg.
- Test Pressure: 22.5 barg.

Including:

- Monitor Nozzle, Manual Adjustable Pattern(Fog/Jet)
- Isolating Valve: Butterfly Valve
- Pick-up Tube for Foam Nozzle

Many monitor model are available including manual with a variety of nozzle options including master stream non-aspirated monitor nozzles, and air-aspirating nozzles.

Gear Type Fire Monitor

Geared monitors are used for a number of applications, and in particular for trailer mounting. The gears make the horizontal and vertical movement of the monitor easy to change. Geared monitors are therefore ideal for protecting a variety of small, high risk areas in a terminal at different heights and distances (small fuel storage tanks and bunds for example). In fixed monitor applications, geared monitors can be used on risks demanding high application rates of water or foam. As the geared hand wheels make it easy to control the monitor precisely.

Body Material : Bronze



Model Number: RK - MON - 4112

Body Material : Carbon Steel



Model Number: RK - MON - 4111

Body Material : Stainless Steel



Model Number: RK - MON - 4115

Body Material : Bronze or Gunmetal



Model Number: RK - MON - 4222

It is better to fail in originality than to succeed in imitation





Double-Waterway (Heart) Fire Monitor

Used in areas requiring greater capacity and velocity than hand-held lines. Will direct water, protein foam, or synthetic foam at a rated flow up to 4500 lpm at 7 bars. Capable of 360° rotation on horizontal axis, 120° on vertical axis.

Regularly Furnished:

Cast brass body with red finish and polish brass trim, less nozzle and stream straightener. Single wheel-vertical worm and gear control. Grease fittings at swivel joints for lubrication, 2 1/2" male outlet.

Product Details: (RK - MON - 4222)

- Control Type: Gearbox (Hand Wheel)
- Inlet connection Size: 4" 150#FF Flanged
- Inlet connection Code: ANSI B16.24
- Flow Rate: 3500 LPM @ 7 bar
- Flow Rate Range: 2500 to 4500 LPM
- Horizontal Throw: 55 meters
- Vertical Thow: 30 meters
- Horizontal Rotation: 0 to 360°
- Vertical Rotation: -40 to +80°
- Material : Bronze
- Design Pressure: 16 barg.
- Test Pressure: 22.5 barg.



Model No.: RK - MON - 4212



Model No.: RK - MON - 4222

Used where associated hazards require a greater flow/effective reach of water or foam solution to be delivered from a fixed location and Corrosion-resistant cast brass construction with 360° horizontal rotation with twist lock mechanism.

Vertical travel controlled by lever and twist lock mechanism, Ball-mounted swivel with grease fittings for lubrication, Low friction loss, unobstructed waterways 2 1/2" dual waterway, 4" 150# ANSI flange base, standard (2 1/2", 3" or 4" Male or Female NPT or 3" 150# ANSI flange base, optional)

Hydrant base with hose outlets or hydrant mounting assembly with master stream nozzle, foam-educting nozzle or deluge tip.

Double Gun Fire Monitor



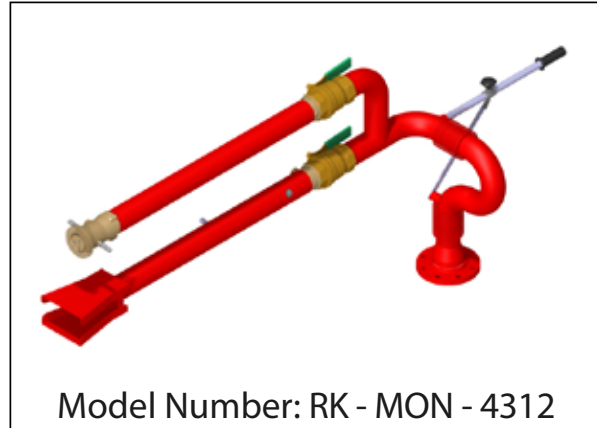
Double Gun Monitor is made of carbon steel, stainless steel and copper alloy. It has a powerful fire extinguishing effect with its double pipe design. The monitor can be positioned at any horizontal or vertical direction.

These fire monitors are manufactured in two types: lever type and gear type.

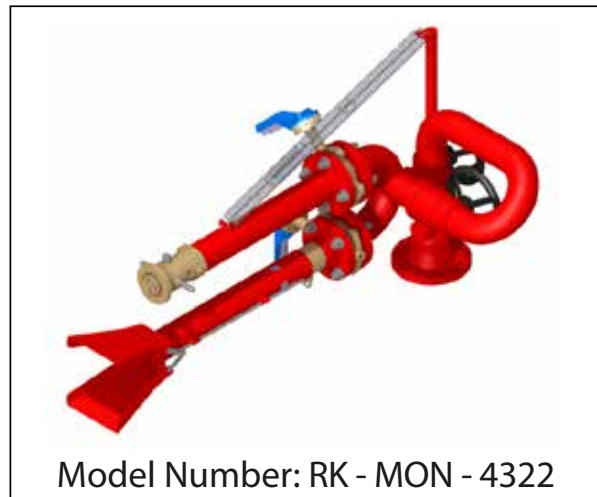
Large flow rate, distant range and discharging range are its features. This monitor is simple and convenient to operate. If you're interested in our fire monitors, please do not hesitate to contact us.

Product Details: (RK - MON - 4322)

- Control Type: Gearbox (Hand Wheel)
- Inlet connection Size: 4" 150#FF Flanged
- Inlet connection Code: ANSI B16.24
- Flow Rate: 2500 LPM @ 10 bar
- Flow Rate Range: 2500 to 3500 LPM
- Horizontal Throw: 55 meters
- Vertical Throw: 30 meters
- Horizontal Rotation: 0 to 360°
- Vertical Rotation: -40 to +80°
- Material: Bronze
- Design Pressure: 16 barg.
- Test Pressure: 22.5 barg.



Model Number: RK - MON - 4312



Model Number: RK - MON - 4322





Portable Fire Monitor

Arka Sanat Portable Ground Monitor has been specially designed to be light weight with excellent stability and low maintenance. It is robust and effective and can be quickly brought into use.

The monitor consists of a two way collecting head mounted on a folding stainless steel ground frame. The Monitor outlet is a ball and socket design which provides direct control over a wide area. The natural reaction force of the water is sufficient to maintain position and at the same time permit adjustment during operation.

Standard inlet connections are 2 1/2" Instantaneous but alternative system hose connectors can be fitted. The standard outlet connection is 2 1/2" BSP male thread but this can also be adapted as desired to hose connectors to permit the use of various nozzles.

Specification: (RK-MON-4412)

- Control Type: Lever (Manual)
- Inlet connection Size: 2 1/2" BS-336 Male
- Flow Rate Range: 1000 to 1800 LPM
- Horizontal Throw: 45 meters
- Horizontal Rotation: 0 to 360°
- Vertical Rotation: 0 to +80°
- Material : Aluminum
- Design Pressure: 14 barg.
- Test Pressure: 21 barg.



Chain Fire Monitor

The Arka Sanat monitor is a chain operated monitor with single water way body. Very easy to operate, this monitor is capable of withstanding flows 4500 lpm. Movements on the vertical & horizontal plane can be performed by rotating the pulleys that transfer the operator force to the monitor joints. This technique is used to operate manually monitors that are installed on elevation above ground. Both vertical and horizontal positions are secured by the worm gear that prevent the monitor to move against any reaction force.

The joints are built in the monitor cast using a double channel system that host the rotational spheres. The "S" shaped body is designed to balance the reaction force and couple the monitor with several different discharge outlets such as water branch pipes, foam branch pipes and nozzles. The material of construction makes it suitable for being used with sea water or water foam solution within industrial harsh environments & offshore applications.

- Control Type: Chain Control (Manual)
- Inlet connection Size: 4" FF # 150
- Flow Rate Range: 2500 to 4500 LPM
- Horizontal Throw: 45 meters
- Horizontal Rotation: 0 to 360°
- Vertical Rotation: -30 to +60°
- Material : Bronze
- Design Pressure: 15 barg.
- Test Pressure: 22 barg.



Self Oscillating Fire Monitor

Arka Sanat Oscillating Monitors are designed to automatically oscillate over a preset arc upon system activation, allowing discharge over a wide design area without manual intervention or the use of electrical power. These are intended for use in firefighting foam systems according to NFPA 11, NFPA 409, and/or NFPA 418, typically found in high risk areas such as tank farm facilities, refineries, aircraft hangars, warehouses, petroleum storage areas, tankers, fire-fighting ships, and oil drilling platforms, heliports and it can also be mounted on mobile fire-fighting equipment.

Self-powered oscillating unit with automatic horizontal movement. Can be deactivated or adjusted angle of coverage as necessary. Equipped with monitor and appropriate nozzle.

The Arka Sanat Oscillating monitor is designed for unattended operation with a Pelton wheel drive the oscillation is driven by mains water and the angle and speed adjustable making it ideally suited for onshore and offshore installations.

Features:

- Single waterway
- Undivided water stream
- Low pressure loss
- Unattended operation
- Self oscillating using mains water
- Pelton wheel drive
- Adjustable angle and speed of oscillation
- Oscillation arc can be set at regular intervals within 360 degrees
- Quick change to manual operation via quick release knob
- Elevation +85 degrees
- Depression -70 degrees



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Electrical Remote Control Fire Monitor

Automatic monitors are devices used to deliver large amounts of water or water/foam solution to remote targets.

These Monitors can be controlled manually via local Mechanisms or automatically by means of actuators and remote control stations. Arka Sanat is a well known manufacturer of industrial heavy duty fire fighting monitors and control systems with a strong expertise in electric, electro-hydraulic and hydraulic controls. The monitors are available with a full bronze body suitable for heavy duty application such as aggressive chemicals plants or offshore platforms. Manufactured with extreme care, every piece is designed to withstand extreme conditions granting a very long product lifetime. In this respect the variety of special materials or surface treatments makes this equipment very robust. Depending on the application the monitors can be equipped with jet/fog nozzles or branch pipes designed for water and water/foam solution. The automatic movements on the horizontal and the vertical plane as well as the stream control (jet/fog) can be provided with hydraulic, electrohydraulic or electric actuators.

Automatic monitors are often selected to protect marine terminals or refining installations where it is required to approach the fire from a certain height above ground. In this respect Arka has developed a series of self standing modular designed structures that may be used to set up monitors at the highest level above protected targets. The structure is manufactured in module and designed for easy erection on site.

This series fire fighting monitor represents one of the most advanced automatic monitors available nowadays for the fire industry. The Monitor is designed to withstand extreme harsh and adverse environmental conditions offering to designers durable Bronze and Aluminium Bronze castings with waterways ranging from 3" to 6". The monitors are ideal for high demanding installation such as jettys, harbours, refineries, chemical and offshore installations.

Remote monitor is available as an automatic monitor with a selection of three controls: hydraulic, electric and electro-hydraulic.

Electrical Remote Control Monitor Model No.: RK - MON - 4152





Pneumatic Remote Control Fire Monitor

The Arka Sanat Pneumatic Remote Control Monitors are high performance units designed to operate in extremely hard conditions and in aggressive environments (refineries, chemical industries, offshore, etc.), where high foam / water flow rates and long ranges of jet are required.

Monitor control panels are used to provide commands and signal position and status of automatic monitors. There are various possible panel configurations depending on system architecture, communication protocol, and classification of the installation area.

Usually, the fixed stations are manufactured with one, two or three monitor controls together with their water and foam control valves. For each monitor the panel is equipped with a joystick for horizontal and vertical monitor movements, a joystick for stream control (jet/fog) and two couples of push buttons for water and foam control valves.

These consoles can be used to control either electric or electro-hydraulic monitors.

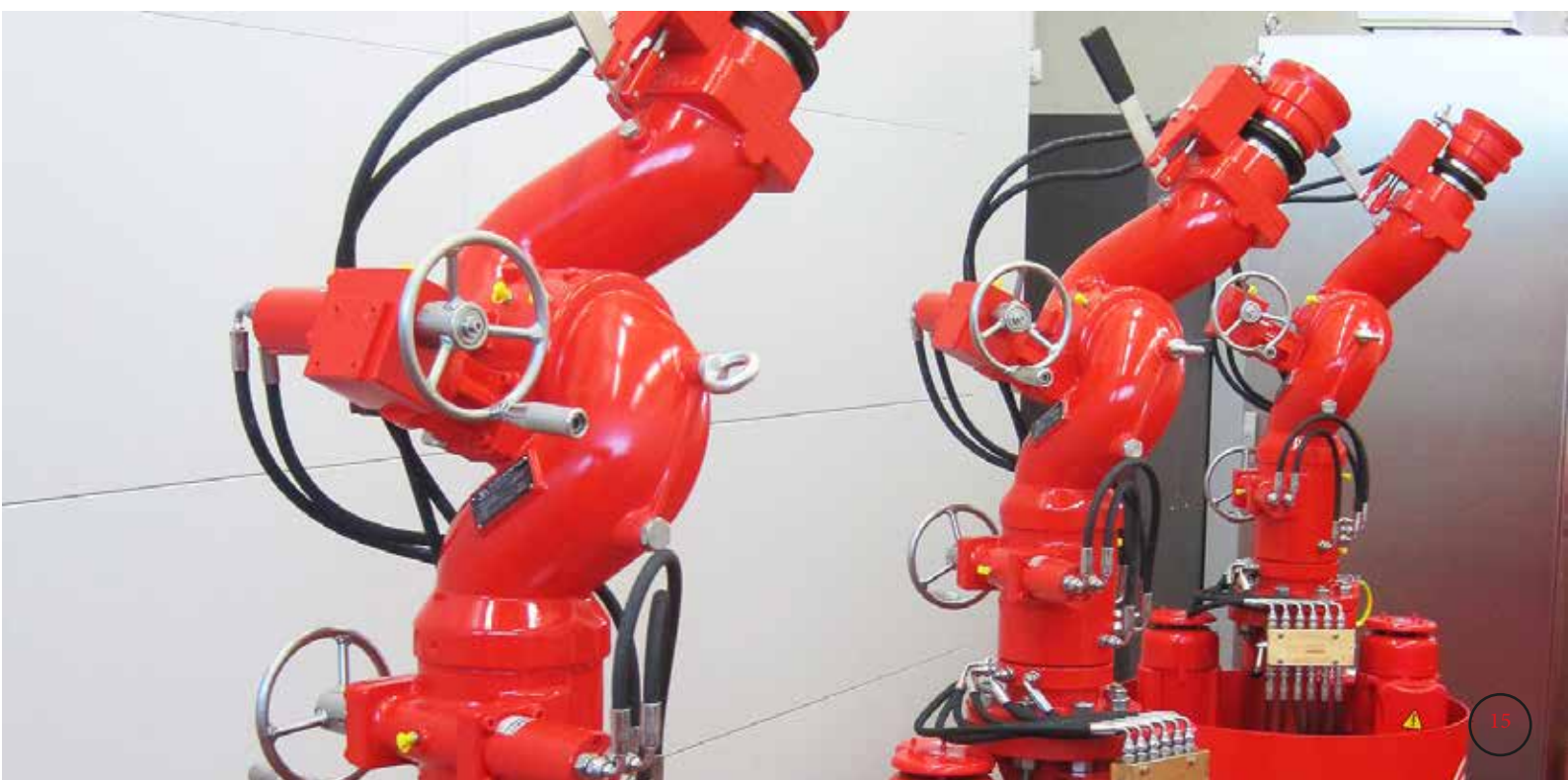
Larger and complex control panels can be designed to host a PLC and control the electric monitors using a serial communication protocol.

This solution is based on a redundant communication link and allows also for system programming that provides fully automatic installations.

The same technology may be used to design multiple control stations or to manage one or more wireless monitor consoles. Dedicated visualization software is also available for specific control room requirements.



Model No.: RK - MON - 4162



Fire Monitor Nozzles

Arka Sanat offers a wide range of Light Alloy or Bronze Monitor Nozzles in either Standard or Self-Inducing models. Designed for use with Arka's Portable and Fixed Monitors the nozzles provide jet and spray functions and a range of pre-selectable flow settings to suit each individual application.

Manufactured to exacting standards the Arka range is suited for use with either foam or water providing a wide spectrum of options for any risk scenario. The Standard Nozzles offers a selection of flow ranges and can be used with water or foam when used in conjunction with an in-line foam inductor.

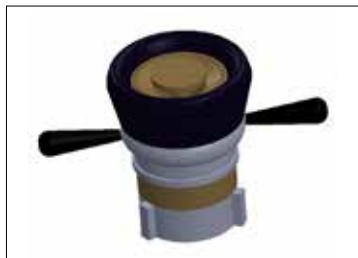
All Standard Monitor Nozzles have a range of pre-selectable flow options easily changed via a simple flow selector at the front of the nozzle. Constant Flow and Select Flow options are available.

An automatic version that regulates the flow according to inlet pressure is the ideal choice for situations where pressures are prone to vary ensuring that performance is maintained.

Supplied as standard with 2½" BSP female threaded inlets for compatibility to Arka (and equivalent) Fire Monitors.



Model No.: RK - NOZ - 1112



Model No.: RK - NOZ - 2112



Model No.: RK - NOZ - 5116



Model No.: RK - NOZ - 6112



Model No.: RK - NOZ - 4316



Model No.: RK - NOZ - 5216

Arka fire monitors integrate the latest firefighting technology and are designed and tested to provide the finest water flow appliances on the market. Our expanded fire safety line offers a wide variety of fire monitors from small to big flow, portable to apparatus-mounted solutions, and fixed-site systems. Whatever the application, Arka has a water cannon to meet your needs.

Specification:

- MONITOR NOZZLES - SELF-INDUCING
- Inlet: 2 1/2" BSP Female
- Flow Type: Constant Flow, Fog/Jet
- Material: Bronze
- Flow Settings: 450 to 5000 LPM

Users:

- Marine & Off-Shore Sectors
- Fire & Rescue Services
- Major Industrials
- Fuel Storage Sites
- Oil & Gas Installations
- Petrochemicals
- Waste Recycling
- Chemical Facilities



آرکا صنعت پیشرو سپهر



Tower Monitor

Fire monitor tower is a kind of auxiliary equipment used for installing fire monitor in high place. It is designed and made according to NFPA standard. The tower can be installed with platform of single layer, double layers or three layers.

The parameter list is made according to natural climatic conditions such as regional windload, seismic intensity and so on. It is just for reference. The influence of winter icing on foundation and tower structure shall be taken into consideration in northern cold and freezing area.



Model No.: RK - TOW - 0061



Model No.: RK - TOW - 1121



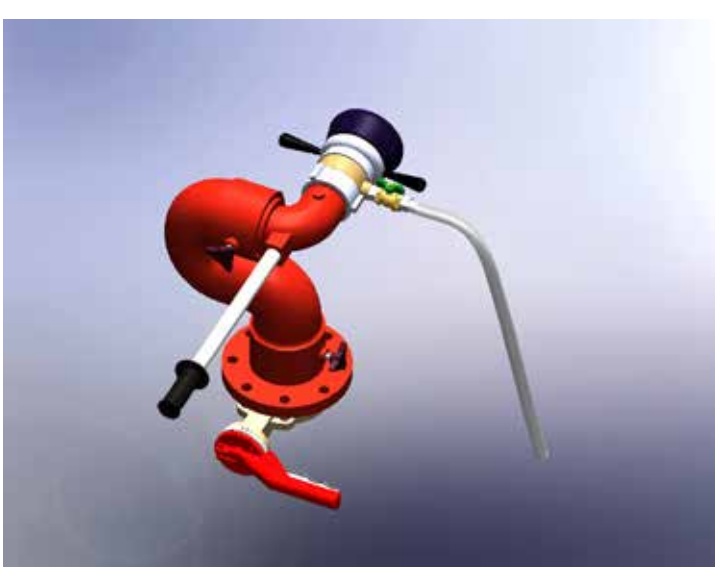
Model No.: RK - TOW - 2181



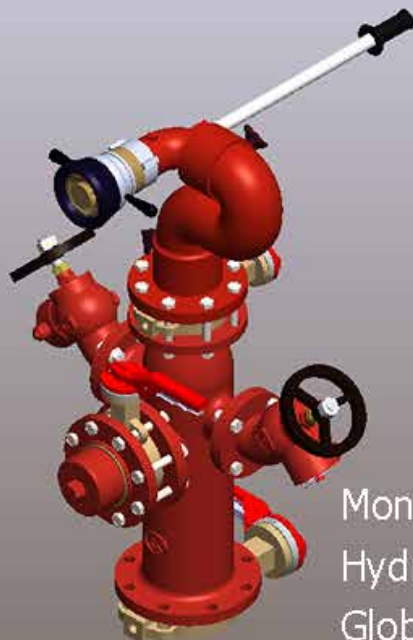
- Max. height of platform: 25m
- When tower has one of the following conditions:
 - It has more than two platforms;
 - Basic pressure (100 years of return period) in the installation site is above 0.85kN/m²
 - Total recoil of the monitor is more than 7.5KN. The column base with shearing resistance k_z should be used to protect the foundation bolt from being destroyed by shearing force.
 - Pressure grouting for the second time is necessary when the vertical loading of the tower is in its place.







مانتیور مدل اس آشنشانی
با اهرم دستی نصب بر روی
هایدرانت با محفظه تر آشنشانی



Monitor Model No.: RK-MON-4112
Hydrant Model No.: RK-HYD-604222
Globe Valve Model No.: RK-LAN-2246



Portable Fire Monitor on the Trailer



The Arka Sanat Monitor Trailer is designed to meet modern industrial firefighting and protection needs, especially for mitigating hazards involving flammable liquids in storage and gases under pressure. It is a mobile large-volume discharging platform capable of delivering up to 22,700 lpm water or foam solution for fire suppression, cooling, personnel protection, toxic gas dispersion and more. Its optional Hydro-Chem capability delivers dry chemicals to extinguish 3-dimensional fires or gas pressure fires. If more flow is needed, maximum flow rate of 30,000 lpm is available on selected models.

The Arka trailer features an A-frame tow bar construction with integral waterway, an internal ballast and an external toolbox. The trailer has been purposely designed to reduce weight and maximize manoeuvrability with stability safety factor achieved by the water ballast tank to increase weight once staged for deployment.

Arka Fire Monitor Trailer is a foam/water delivery device equipped with a self-educing gladiator nozzle. It features straight stream to fog pattern adjustability, turn and click flow adjustment and a self leveling stability system. It delivers outstanding foam range and foam quality. Flow ranges available from 1,500 to 3,000 gpm. This unit's compact and lightweight design offers the capability of manual deployment.



Model No.: RK - MOT - 101



Model No.: RK - MOT - 102



Model No.: RK - MOT - 103



Model No.: RK - MOT - 104



**“A satisfied
customer**

**is the best business
strategy of all”**



Every client is unique, every situation is different. Practices turn to Arka Sanat for lots of reasons. But, in most cases, it distills down to a single word: Trust.

- Trust in our experience.
- Trust in our solutions.
- Trust in our results.

Contact Us

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